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Rural Lines

RURAL ELECTRIFICATION ADMINISTRATION • U. S. DEPARTMENT OF AGRICULTURE

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U. S. DEPARTMENT OF AGRICULTURE

SPECIAL
SAFETY
ISSUE



A Message from the

ADMINISTRATOR

During 1958 thirty employees of rural electric systems met sudden and untimely death on the job. The record shows that most of them were not wearing rubber gloves when they should have been doing so. They were using unsafe working methods in unsafe positions. They were badly supervised. Most of these people could have been alive and working today if management had done a proper job of teaching safety rules and regulations and enforcing them.

Each one of these fatality reports was of grave concern to me. As they began to mount in numbers the situation became one of personal exasperation and frustration.

No one in Washington can run your business for you. While borrower safety has been given a very high priority in REA, only you can prevent accidents. Management, and only management, can be responsible for employee safety.

You may need a policy to give your manager authority. We can help you write it—but it must be your policy, and a policy alone won't prevent accidents. You need definite safety rules and regulations for your employees. We can furnish you samples—but they are your rules, and rules aren't of much value unless you enforce them. We will continue to give you advice and assistance through our staff. But we can't run your program for you.

We urge you to step up your safety program immediately. Re-examine your practices. Be sure that you are doing everything you can to protect each employee.

We suggest that you join the National Safety Council and other organizations which can help you have an effective safety program.

The fatality rate among our borrowers so far in 1959 is no better than it was at this time in 1958. Unless every one of you takes positive steps at once to prevent accidents, 1959 may go down as one of the blackest years yet in REA safety records.

Rural Lines

David A. Saml
Administrator.

John H. Howard, Editor. Contributors to this issue: Walter J. Clayton, Frank G. Jolley, Jr., Hubert W. Kelley, Jr., Bernard Krug, Louisian Mamer, and A. B. Shehee.

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(This accident never happened. It is a composite of several typical real accident reports.)

DEATH

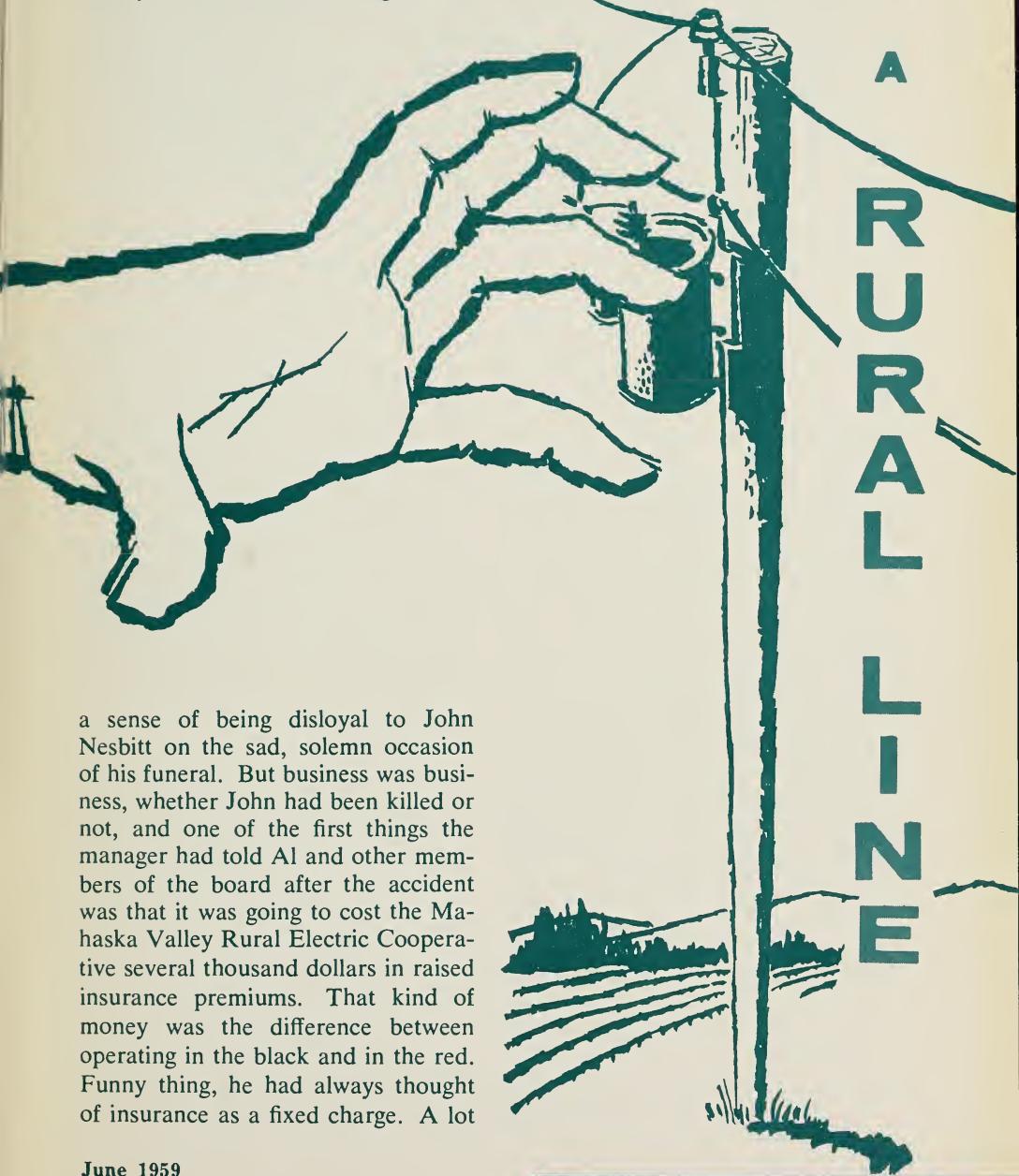
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Al Fitzimmons was bothered by

several things the day of the funeral. One of them was worry about money. That bothered him, gave him



a sense of being disloyal to John Nesbitt on the sad, solemn occasion of his funeral. But business was business, whether John had been killed or not, and one of the first things the manager had told Al and other members of the board after the accident was that it was going to cost the Mahaska Valley Rural Electric Cooperative several thousand dollars in raised insurance premiums. That kind of money was the difference between operating in the black and in the red. Funny thing, he had always thought of insurance as a fixed charge. A lot

of little accidents and one big one made a lot of difference.

Al Fitzsimmons was also bothered by a sense of guilt. Somewhere along the line he might have done something to prevent this accident. It wasn't necessary for John Nesbitt to die — suddenly—20 feet above the ground. If somebody had only made John put on his rubber gloves. He remembered that Frank Turnbull, the co-op manager, had mentioned something about a safety program not long back. Al had been against it. They already had a safety program, Al had said. That fellow from the State capital came around every month and instructed the crew in safety. They didn't need any more program than that, any more rules and regulations, red tape. Mahaska Valley's young linemen were being taught well, and the old timers, like John Nesbitt, were skilled and careful.

The Mahaska Valley co-op did have a good crew. Most of them, like John Nesbitt, had been with the co-op since the first lines were built. John was a good, steady type. He had a wife and two kids. You couldn't find a lineman with more know-how than John Nesbitt.

He was a safe worker, too, Al recalled. Safer than most, and he was always cautioning the younger men. He had his own peculiar ways of doing things. Since he was an old timer and knew more about electricity than most of them ever would, he did things his own way. They always felt around Mahaska Valley that a crew that knew its stuff didn't need a lot of bossing and direction. Take John Nesbitt, for instance. He knew his stuff. If he did something that looked a little unusual, you could bet he had a reason for it.

It was a bright fall morning, Al remembered, the day of the accident.

The line superintendent had told John Nesbitt to go out to Smithers Corners and lend a hand to Bill Johnson, a fellow lineman who was in charge of a two-man crew who were putting guys on three poles of a three-phase line. Bill Johnson was a nice young fellow who had been with the co-op about 3 years. He had learned his trade fast, mostly under the tutelage of John Nesbitt. Johnson was regarded as foreman material, and either he or Nesbitt usually were put in charge of a crew when the foreman or line superintendent were not available.

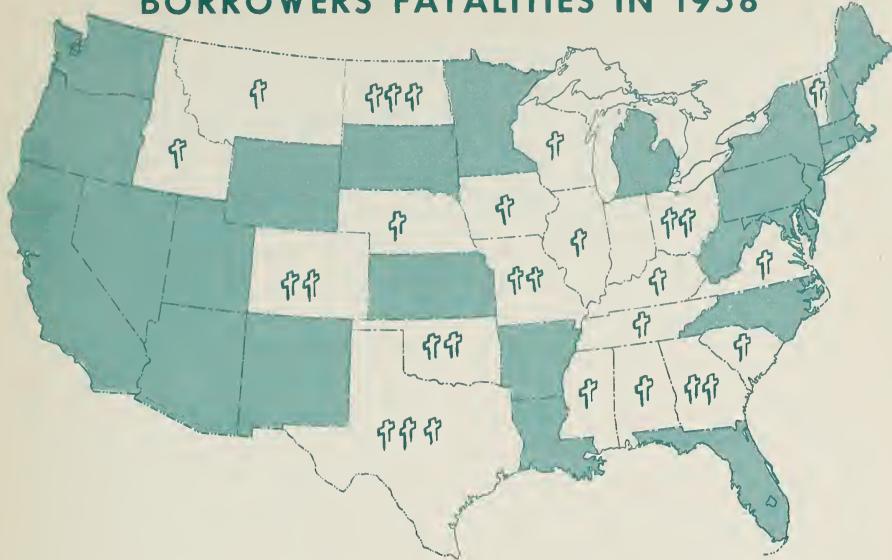
The spans of line between the three poles were slack, though the line was hot. Pole number three was a dead-end.

John Nesbitt arrived on the scene about the time that Johnson and his two helpers were starting to hoist a wrap guy they needed to straighten the pole. They greeted him jovially. John had on his climbers and safety belt before they started to hoist.

As the pole began to straighten, a too-tight jumper wire was pulled into an eyenut. The crew heard the arc. They stood clear of the guy wire. Bill Johnson told one of them to get rubber gloves from the truck, so that he could let off the hoist and stop the arcing.

"I'll turn off the juice, so you can fix that jumper, Bill", said John Nesbitt. John grabbed a hot stick, fastened it to his belt and started climbing. Bill Johnson remembered later that John didn't have on rubber gloves. But it never occurred to him to admonish him. John was an older man and he knew the line was hot. You just don't boss the older men around at Mahaska Valley, when you aren't a regular foreman. It crossed his mind as John climbed the pole that Bill himself had been taught to always

BORROWERS FATALITIES IN 1958



Each cross represents one rural electric fatality.

send up the stick on a line, but old timers like Nesbitt hated to use a helper when there was more than one thing to do at once.

John belted off above the neutral. That's the last anyone saw him alive. They heard an arc, and he slumped in his belt with his left hand on the neutral wire.

They gave him pole top resuscitation, and worked on him 2 hours more after they got him on the ground. It didn't do any good. It was easy to figure what happened. A strap on one of his hooks had broken. When it gave way he fell out of position and grabbed the phase wire.

One thing certain, thought Al Fitzsimmons, we need something to prevent this happening again. The board has to give Frank Turnbull the authority to crack down. We have got to have a better safety program. ■

443 DEAD POINT UP THE NEED

The Mahaska Valley Rural Electric Cooperative is purely fictional. So is the late lineman, John Nesbitt, whose death is recorded as a typical case study elsewhere in this issue. But there was nothing fictional about the 443 employees of rural electric co-ops who have been killed on the job since 1938. They point up the need for better accident prevention programs on rural electric systems.

They were real flesh-and-blood people, each of whom would probably still be around today had he not personally coincided at the wrong moment on a particular day with a lethal hazard.

The great majority of them were killed by electric shock. It accounts for 320 of them, or 72.3 percent of the total. Transportation accidents account for 36 of REA borrowers' fatalities in that period, and 35 employees were killed by falling objects. Percentagewise, this is 8.1 percent and 7.9 percent, respectively. Twenty-one deaths were caused by men falling; nine of these from poles. Three were killed by explosions. The remaining 29 were killed by a variety of agencies.

Until 1956, the fatality rate had gone steadily downward. The downward trend made sense. The formative years were over. The accident-producing confusion of the big construction years was at an end. Employees and management, by 1956, should have learned more and more about the hazards of their system, and how to successfully cope with them.

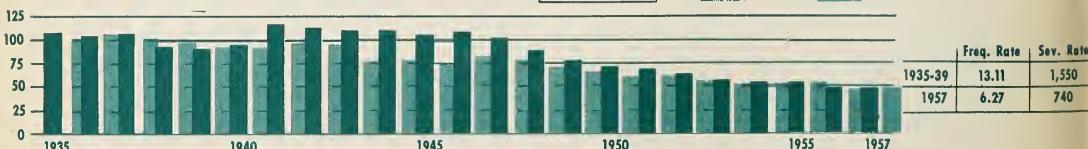
The 19 employees fatalities in 1957 gave rural electric systems a fatality frequency, based on number of men exposed, about six times greater than that of the electric utility industry as a whole.

A study of the 30 fatalities which occurred during 1958 indicates the reason for the rising death rate: inadequate safety programs on the part of many co-ops.

In accident report after accident report, the story is the same:

- Poor job planning.

INJURY TRENDS SINCE 1935



From National Safety Council reports from all industries. Compare your rural co-op figures.

- Poor supervision.
- Inadequate safety policies and rules.
- Inadequate personal protective equipment.

These are the four leading causes of fatal injuries in rural electric systems.

The big, one, underlying cause in almost every case is the fact that the co-op's management didn't fully realize or exercise its responsibility for accident prevention. If the manager and staff do not take a lead in preventing accidents, there will be more and more fatal accidents which never had to happen. If a co-op's board of directors does not lay down a definite, positive policy which indicates its deep interest in the safety of their employees, and make the manager responsible for carrying out this policy, it is almost a cinch that, sooner or later, the co-op is going to have serious injury trouble.

ANNUAL MEETING LESSON

—Electrical safety points and respect for high voltage were taught in an informative dramatic live-line demonstration given last summer at the 11th annual meeting of Northern Electric Cooperative, Aberdeen, S. Dak. Instructor was Marvin Nelson, State instructor of the Job Training and Safety Program.

Could You Go Broke From

Accidents?

There was a time when rural electric cooperatives in the State of Arizona were paying an extremely high accident insurance rate. It amounted to \$13.86 on every \$100 of co-op payroll. This ran into a lot of money, which the co-ops could well have used for other purposes. At this time private electric utilities in Arizona were paying less than \$5 per \$100 of payroll for insurance.

What was the reason for this difference in rate? Simply that the co-ops had a high accident rate, which meant that their insurance rate was correspondingly high. The Arizona co-ops adopted active safety programs, and availed themselves of the services of a first-class safety instructor. At this time the insurance rates are down to \$4.89 per \$100, which saves the co-ops \$40,000 annually.

There are other States whose record is almost as dramatic. The institution of safety programs started insurance rates downward. If the accident rates stayed down, so did the insurance rates. If one co-op had a bad record, it was reflected in the insurance rates of all co-ops, as a rule.

There are a few horrible examples of co-ops which have almost gone broke because their public liability insurance coverage was less than judgments against them, right when they needed money the most.

Many a co-op could go broke for lack of a safety program. This may seem impossible, since they are all

covered by insurance for their employees. But a series of injuries can raise havoc with insurance rates. More important, the same lack of accident prevention which causes injuries to employees can also cause injuries to the general public. A multiple-death accident on the highway could easily exceed the average co-op's public liability insurance coverage.

For instance, assume a co-op's maintenance truck goes out on the highway with faulty brakes. This could happen and it has happened. Assume that this time this truck with bad brakes gets out of control going down a steep grade. Accident reports of the Interstate Commerce Commission will show you this happens even to trucks with commercial hauling contracts oftener than it is pleasant to think about. Assume the free-rolling co-op maintenance truck hits a passenger car coming uphill and kills its four passengers. What is this going to cost? Will the co-op's insurance cover it?

The answer is probably not. Each of these four dead travelers is probably going to cost from \$40,000 to \$45,000. If the co-op is carrying \$100,000 worth of public liability insurance, it is in the hole for from \$60,000 to \$80,000. This is a big jolt, even for the most prosperous rural electric system.

The difference between this kind of a public liability tragedy — speaking from the standpoint of the co-op — and one involving hurricanes, tornados or other acts of God, is that the former could obviously have been prevented. It doesn't therefore create a sympathetic frame of mind in any-

one for the financial plight in which the co-op finds itself.

A co-op could go broke from work injuries to its employees, too, though thanks to workmen's compensation laws, there is more protection to the employer from unrestrained jury sympathy. ■

ONLY YOU CAN STOP INJURIES

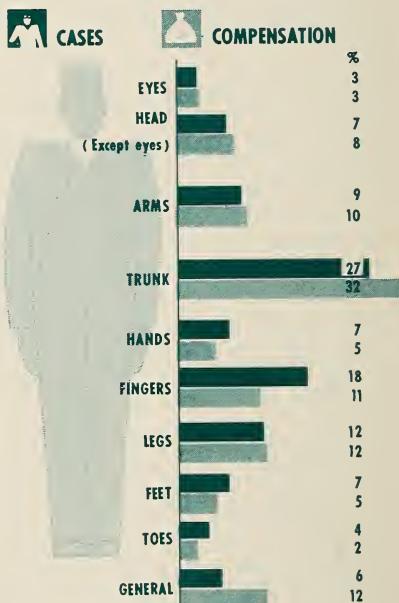
Management — both board and manager — is directly responsible for the safety of rural electric co-operative employees. It is a responsibility that cannot be sloughed off. It is a responsibility to the employees and to their families. It is a responsibility also to co-op members, for accidents, whether fatal or not, cost a tremendous amount of cold cash.

Progressive businesses carry on educational safety work with a flourish. The new employee is given a safety manual of his own before he starts to work. He is immediately exposed to a series of safety orientation lectures, which are kicked off by a high-ranking member of the firm, to impress on the newcomer's mind the importance of accident prevention. He constantly sees safety movies. Every week he attends a safety meeting, where a fellow worker delivers a carefully prepared talk, well illustrated with flannel board training aids. He sees new safety posters every month on well located bulletin boards. The company house organ carries safety articles and well illustrated charts of the intramural shop safety contest and the company's current injury frequency and severity rates.

Awards — individual and shop — are made annually and are the occasion for staging an auspicious ceremony.

The time, effort and money put into safety education by big industries is impressive. The truth is there isn't a single technique they use that cannot be done also by a small industry, and

PART OF BODY INJURED



Accurate reporting and analysis reveals need for personal protective equipment. Figures from National Safety Council.

done even more effectively. And, with a little ingenuity, it isn't necessarily a very costly effort.

Management is responsible for carrying on a consumer education program, on the subject of electrical safety.

PENALTIES FOR SAFETY VIOLATIONS

by Walter J. Clayton, Labor Relations Adviser

The right to discipline employees for violations of written safety rules and regulations is strictly a function of management. This is not only an inherent traditional right of management; it is a responsibility of management.

To be effective, all safety rules and regulations and policies concerning the penalties for failure to observe the rules must be in writing. Copies of these must be posted and placed in the hands of every employee. At least once a week the employees should be reminded of the rules and regulations and penalties.

Penalties imposed for failure to observe safety rules generally follow the usual disciplinary sequence—that is, oral warning followed by a written warning and finally layoff or discharge. Sometimes such failure will cause an automatic penalty on the first offense. All penalties must be strictly and impartially carried out.

Top management must believe in and enforce the safety program. A foreman will not enthusiastically cooperate in a program unless he can see that his supervisor believes in it. Safety is a line function and an integral part of the duties of line supervision. Safety is tied into the foreman's regular day-to-day activity. He must take an active part in making each job safe. He is then placed in a position of responsibility for the safety program.

The attitude of the rank-and-file towards safety is to a large extent a reflection of the supervisor's attitude. A foreman must be constantly alert to prevent unsafe conditions. Individual discussion between foreman and employee is especially valuable in promoting safety. Group discussions on safety matters, led by the foreman, are also of value in developing safe practices.

How Much Does An Accident Cost You?

1. *Wages paid for time lost by workers present but who were not injured.*
2. *Damage to material and equipment.*
3. *Wages paid for time lost by injured workers other than those covered by workmen's compensation payments.*
4. *Extra cost of overtime work because of the accident.*
5. *Wages paid supervisors for time required for activities because of the accident.*
6. *Decreased output of injured workers after return to work.*
7. *Cost of learning period of new worker.*
8. *Uninsured medical costs borne by borrower.*
9. *Time of supervisors and clerks in investigations or processing accident forms.*

ACCIDENT REPORTS--

The Basic Tool in Safety

Safety personnel in REA are hampered in their job of helping borrowers by the borrowers themselves. The latter are not reporting lost time injuries. A failure to report injuries is not just a simple matter of overlooking stated policy. It is a failure on the borrower's part to avail himself of the basic tool in accident prevention: accurate accident analysis. This can only be done when thorough, accurate and complete reports are received. In failing to make reports the borrower also neglects his own job of analyzing his own experience.

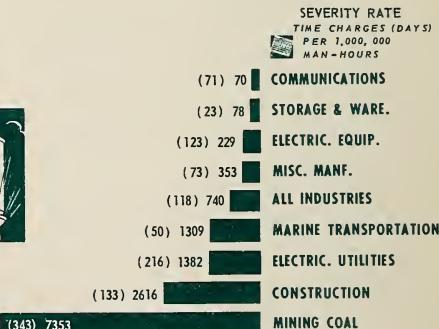
Reports received cover but a fraction of the injuries from which borrowers' employees suffer. And these reports follow no single reporting system. Few of them are made out according to Hoyle, so that a standard report could be made of the frequency and severity of any borrower's injury rates, or an accurate report to indicate how rural electric co-ops compare with other industries.



Figures which do exist tell a sad story. There are good figures on the reported accident experience of the entire electric utility industry in 1957, to include their total number of fatalities. There are good figures on the total number of men exposed, both for the whole industry and for rural electric co-ops. Percentagewise, it shows the rural electrics suffered between five and six times the number of accidental deaths. This is according to 1957 figures, when REA borrowers reported 19 fatalities. At the time of publication, there are no industry figures for 1958, to indicate how the co-ops' 30 deaths may stack up against all electric utilities.

It is logical to assume that rural electric co-ops have as high, if not higher, ratio of other lost time injuries to fatalities than does the industry as a whole. Large industries can afford to keep safety engineers on the payroll. While the co-ops have excellent training, it is concentrated on linemen. Big industries have continuous training programs covering the whole book, and plenty of supervision. But here again we run into interesting figures.

The rural electric co-op figures are from total numbers of accidents reported. The electric utilities industry figures are according to frequency rates computed by the National Safety Council and the Edison Elec-



Relationship of electric utilities rates to other industries.

tric Institute. In 1957 the industry had 37.5 lost time injuries per fatality; co-ops report 14.2. In 1956 the industry's figure is 42.7; co-ops 22.3. In 1955: industry—40.1; co-ops—12.2. In 1954: industry—45.5; co-ops—10.7.

Let's go back to the first co-op reports, beginning in 1939. In 1939: industry — 41.8; co-ops — 7.2. In 1940: industry—41.6; co-ops—9. In 1941: industry—50.6; co-ops—5.6. In 1942: industry—48.5; co-ops—10.5. Last year, the co-ops reported 178 lost timers in addition to 30 fatalities, a total of 6.8 times the death rate from injury.

Let's face it. The figures REA gets aren't showing the whole picture.

The whole picture would show unsafe mechanical conditions that are overlooked, and which might kill a man tomorrow instead of just causing him an injury. It would show which types of accidents are more frequent,

and thus most costly on the insurance bill. It would show the unsafe acts and unsafe personal factors which cause little injuries, and can cause big, costly ones. It would show the agencies which cause expensive accidents, and sometimes death, along with the obvious one, hot electric wire.

The whole picture would show any borrower how many accidents he has in relation to other borrowers, and how many bad, costly ones he is having, proportionately. It would point out to him the causes of accidents in all rural electric co-ops which may cause him accidents also.

The picture is obtained by complete and thorough reports, made out according to a standard pattern, so that each injury can be thoroughly analyzed, and the results of the analysis added to the total report of each co-op and of the entire rural electric utility industry.



SOME CO-OPS HAVE OUTSTANDING SAFETY PROGRAMS

In North Carolina there is a co-op whose employees have worked more than a million man-hours without a lost time accident. It is the Blue Ridge Electric Membership Corporation, of Lenoir. This accident record compares favorably with the all-time record of 4.3 million man-hours with no lost-timers which was piled up by a utility company in Fall River, Mass.

Iowa has a borrower with three-quarters as long a record. Rural Lines will not list here the co-ops who have amassed records of a half million man hours, and on down to 50,000 man-hours, the bracket at which industrial firms are usually presented a plaque to prove their arrival among the elite

in the world of safety. We do not have a complete list of them at hand. There are many of them, and their accomplishment in establishing injury-free records is no accident.

APPRAISE YOUR OWN PROGRAM

Most good safety contests use a system of self-appraisal, in which contestants use a check list to see for themselves how effective their accident prevention program is going to be in the long run. Here is a short list that may give you a clue how well you are doing:

1. Has your manager, or line superintendent, made a talk to the line crew on accident prevention within the past (week) (month) (3 months) (year) (never)? Check one.

2. Has your co-op newsletter had an article on safety in the (last issue) (one of last two issues) (once in last 6 months) (never)? Check one.

3. Is there a safety poster on your bulletin board at this particular moment?

4. Is the fire extinguisher nearest your desk filled and ready for action? Has it been inspected within the last (month) (6 months) (year)? Check one.

5. Does your board have a written safety policy?

6. Do you have a set of rules and regulations, written down, and read by all employees?

7. Is your pole yard in neat and orderly shape at this particular moment?

8. Could you reach in any bin in your supply room, right now, and be dead sure of getting the part which is supposed to be stored there?

9. Could you look in any truck

around your headquarters, right now, and find that all equipment is there, and in its place?

10. Are you sure in your own mind that every pole on your system could stand up under a high wind tonight?

11. Have you seen any of your line employees working on the job without a hard hat within the past (month) (6 months) (year)? Check one. If so, did he get a reprimand?

12. Have you seen any of your linemen working on a hot line without rubber gloves within the past (month) (6 months) (year)? Check one. If so, did he get a reprimand?

13. Was the safety equipment of all men out on the maintenance crew right now inspected before they left?

14. Has any of your drivers committed a minor traffic offense within the past (month) (6 months) (year)? Check one. If so, did he get a warning from the manager?

Grade the above questions to suit yourself. No matter how you do it, an honest evaluation will give you a fair idea how likely your employees are to avoid an accident that may be coming your way. ■

REA And Your Safety Program

REA has an interest in safety. A series of accidents of any borrower could affect the security of the borrower's loan.

REA is limited in what it can do to help borrowers prevent lost-time injuries. Nonetheless, it can do, and does, quite a lot to provide material upon which a borrower's program may be built.

REA helped establish safety and job training programs and hot stick schools.

Fieldmen are available to help borrowers with their safety problems.

A report on the status of accident prevention among the borrowers is issued periodically, based upon such reports as are sent to REA. Analyses of accidents are sent out in letter form and in reports.

REA has published bulletins on principal areas of injury hazards.

New publications which are now in preparation are a sample safety policy statement and sample safety rules and regulations.

They may be adopted by any electric co-op or modified or expanded to suit individual co-op requirements. ■

THE NATIONAL Safety COUNCIL— DO YOU BELONG?

Of the 983 active electric borrowers of REA funds, only about 70 are found to be members of the National Safety Council. Only a few are entered in the Safety Council's contests, which are a sure and simple way of finding out just how a co-op stands, safety-wise, compared with other electric utilities, and what it can do to improve its accident record.

The National Safety Council is a non-profit organization, chartered by Congress, which is sponsored by every segment of American industry. Its Electric Utility Section takes in most of the utilities in the country. The Council has available literature and training aids to cover just about every unsafe act or unsafe condition known to exist. Its figures on safety records, along with those of the Labor Department's Bureau of Labor Statistics, are considered to be the authoritative final word on the subject.

Membership in the Council currently costs a rural electric co-op about \$30. For this it can buy any of the Council's literature, training aids, posters, or movies, at a considerable discount. Membership also entitles the co-op to consultation and advice on safety matters, and to enter into safety contests for which it may be qualified. The Council's Safety Con-

test Rules Committee sets up standards for contests between similar industries of similar size when any such industry generates enough interest to request one. There is at present no contest for rural electric cooperatives or for purely rural telephone systems.

The National Safety Council's list of available materials require several catalogs. Here are some of them:

- **Posters.** The Council has posters on every subject, all aimed straight at the source of trouble—worker attitudes and actions that lead to accidents. Posters come in three sizes: 8½ by 11½ inches; 17 by 23 inches; and big jumbo billboard posters. Also available are safety banners, payroll enclosures, and poster electros for reproduction. A directory of 750 safety posters is available for 60 cents.

- **Periodicals.** Valuable tools for keeping abreast of news in accident prevention are such periodicals as: the monthly magazine, National Safety News; Public Utilities Newsletter; Industrial Supervisor; and the Safe Worker. Others are devoted to motor vehicle safety and specialized industry. Some may be imprinted with a company name for distribution to employees.

- **Manuals.** There are many of these. The 1341 page Accident Prevention Manual is encyclopedic. The Handbook of Accident Prevention is a good guide for small plant operations. There are manuals on how to start a safety program, and on how to make safety speeches. Manuals cover practically all subjects.

- **Films and film strips.** Film material covers many safety subjects, and may be leased or bought.

- **Safety Training Institute.** Five times a year the Council conducts a week-long course in accident prevention, designed for men new to the safety field.

ARE YOUR CONSUMERS SAFE?

Each year injuries to consumers points up the need for good consumer education by rural electric co-operatives. Many co-ops carry on such campaigns by articles in their newsletters, special consumer safety meetings, posters designed to remind consumers of the dangers in being careless around electricity.

The pictures on this page are designed by the REA safety staff for a proposed television packet on consumer safety. This packet, "Electricity—Treat It with Respect," may be available in the near future.

There are other hazards not pictured here which have been the cause of injuries to rural electric consumers. Some of them could have been prevented by a consumer education campaign. Others were the result of inadequate inspection and maintenance on the part of the co-op.

A housewife on a southern farm, in a recent month, was happily doing her Monday morning washing. Her day was happy because the electric machine made her washday easier than it used to be. It hadn't been easy to sell her an electric washing machine, however. It was the result of a hard power use campaign on the part of the rural electric co-op of which she was a member. Her hands were wet from her work; so was her clothing. She didn't know the cord from the outlet to her machine was faulty. It struck her shoulder and electrocuted her.



Do your consumers know that they should call the co-op as soon as they see an electric wire on the ground after a storm?

The co-op was not legally at fault. But what do you think it cost it in good will? How much do you think it may have set back its power use promotion, which had just been getting nicely started?

It would have been easy to have included home safety in the columns of the co-op's newsletter. A safety lecture to housewives might have prevented this fatality. It also would have drawn a crowd to whom the advantages of electricity, safely used, could have been taught.

A farmer in a northwestern State was swathing around a neighbor's wheat field. A co-op's transmission line ran along a right of way easement inside the field. Wheat was sown, as usual, right up to the fence, around the poles. The poles were secured with guy wires. The swather's idler wheel struck a guy wire. The pole, which looked solid, was infected by shell rot. The pole snapped off; the



Careless handling of TV antennas and radio aerials have caused many fatalities on rural lines.

transmission wires came down on the farmer. He suffered severe burns and permanent injuries.

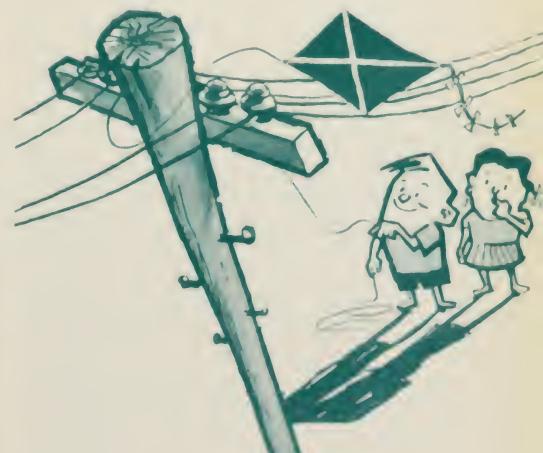
The court ruled that the co-op was at fault, citing several other similar

cases involving rural electric cooperatives. It was a costly accident for the co-op. It could have been prevented with a much less expensive, thorough-going pole inspection campaign. ■

Co-op crews are sometimes careless about trimming trees near power lines — A broken limb can kill or maim people or animals.



Unless warned, kids will fly kites around electric lines.





Mattson



Stone



D. Peterson



Johnson

Who Says Accidents Can't be Prevented?

A few wise words from the staff and crews of a co-op that has never had a lost-time accident.

The management of Nyman Electric Cooperative, in Stanton, Iowa, has been expending a lot of time and money for accident prevention. For the manager and board of this 1550 member co-op have given safety the highest possible priority. The results: Nearly 750,000 man-hours without a lost-time accident; a perfect safety record.

Responsibility for safe practices at Nyman begins with the board of directors. In Policy No. 10, the board requires that the co-op safety rules "be adhered to in their entirety," that the manager set high personnel standards, that the co-op furnish all working equipment, including such personal equipment as hooks and belts, and small tools, and that all equipment and trucks be properly maintained at all times.

Policy No. 11 makes it clear that operation of the co-op's motor vehicles in violation of Iowa laws "shall be the cause for immediate discharge."

Manager Allan Swanson, a modest young man who is a serious student of personnel management, carries out these policies to the letter. But one of

the surest clues to what's behind Nyman's perfect safety record can be found in Swanson's personal philosophy of employer-employee relations. Here are a few of Swanson's frequently unorthodox observations about running a safe (and happy) co-op:

- We've got a good record because we have good employees. When we hire a man, we look for much more than ability. Each applicant is interviewed in his own home, with his wife present. I want her to know that a co-op job can mean that her husband may be called out in the middle of the night or called away from his dinner guests.

- I never hire a man until every one of my present employees (there are seven of them) gets a chance to meet him. Then I ask the people whether they'd like to work with him, or whether they know of any reason why he wouldn't fit in.

- The kind of people we want at Nyman are people who feel that they have a secure place in the community, who would feel comfortable visiting in any house in town or country. I have a party for all of them at my home at least once a year; I'm in their homes



S. Peterson



Lofgren



Gray

frequently. Then we have frequent parties for husbands and wives in our own recreation room in the co-op headquarters. We think parties are kind of important.

- Job training courses and refresher courses are the rule with us. Just as important, however, is that we have chosen the kind of men for our line work who can take instruction without resentment.

- People ask me if our policy of buying personal equipment for the men doesn't lead to abuse of equipment. The answer is no.

- The office manager, the power use adviser, and the line superintendent all have a hand in preparing the annual budget. They prepare the estimates for their own departments; we then talk over the budget before it is submitted to the board.

- Every employee knows the financial record of this co-op as well as I do. We go over it together each month. After our last major outage, when everyone had been working overtime, one lineman said to me, "This outage has really cost us two

ways — in lost revenue and in overtime." His first concern was the co-op.

- Last year we had 750 job tickets. That means that the men were in contact with about one-half of our members. They are proud of the fact that they can answer any member's question about the operation of the co-op. By the way, we didn't get a single written consumer complaint last year.

- The men are responsible for their own trucks, repairing them and keeping them clean. For our part, we try to let them have the vehicle equipment they prefer.

- I like to think that I could leave here for 6 months and find things running just the same when I returned.

Why Nyman employees think they have a perfect safety record . . .

A RURAL LINES reporter asked each person who works at Nyman Electric why he believes that his co-operative has never had a lost-time accident. Employee replies reveal that workers are personally grateful

**Manager
Al Swanson
reminds
himself of
a basic
principle.**



**Safety
is Management's
Responsibility**

when management takes a sincere interest in their health and safety.

Carl Mattson, line superintendent — “The most important reason for our record is that all safety equipment is furnished by the co-op — hot sticks, hard hats, gloves, goggles, and so on. Gloves are sent away to a lab for testing every 90 days, and when any equipment shows signs of wear, it is discarded. Also, Al (Manager Allan Swanson) sees to it that no co-op vehicle is driven faster than 50 miles an hour.”

Kenneth L. Stone, office manager — “I've thought a lot about the record here, and I think that high morale and good working conditions have a lot to do with it. A man who worries about his job is the kind of man that makes accidents happen. We work in the sort of place where no man who does his work properly has to worry about his job. Also, the linemen know that the co-op is always ready to give them what they need to perform a better job.”

Don Peterson, power use adviser — “I think we've never had an accident just because management has demanded that we follow proper safety practices. Once a month, the line superintendent holds a safety meeting for all employees, but we hear a lot about safety between meetings. For example, every man working for the co-op is a qualified First Aid Instructor.”

Larry Johnson, lineman — “If I had to think of one explanation for our lack of accidents, I'd say *teamwork*. We work like a team here, from the linemen right on up to the manager and board. I feel that I can trust the men I work with as I trust myself. You're looking out for the other man all the time, and he's looking out for you.”

Stan Peterson, line foreman — “We younger guys grew up with good safety practices. It's never occurred to me to do a job any way except the safe way. We discuss any new job before we tackle it, and plan ahead carefully on any hazardous part of it. Also, I feel that as long as the co-op buys the safety equipment, the least we can do is to use it.”

Mrs. Theodore Lofgren, billing clerk — “I think that the one big reason for our perfect safety record is the personal interest that Mr. Swanson takes in all matters of safety. I'm sure that his regular reminders to the men helps keep them careful.”

Jim Gray, lineman — “The boss means business when it comes to safety. Putting on my hard hat and gloves is as natural to me as putting on my glasses in the morning. Also, I feel confidence in the equipment; I know that it's the best that money can buy. But there's one other thing. I think that if I got hurt, the manager would feel as responsible as I would. That's something to think about.”

SAFETY CLINICS — Job-training safety clinics last fall for key public district employees proved so popular that the Nebraska Job Training and Safety Advisory Committee has included them in their regular training program. Four Technical Training and Safety Clinics at different places in the State drew 168 men including managers, engineers, superintendents,

foremen, metermen, and top service men. Program included: system grounding, apparatus grounding, paralleling transformers, sub-station safety—maintenance and operations. Employees of the Vocational Education Division of the State Department of Education and safety and engineering representatives of REA conducted the clinics.

S A F E T Y



PAYS OFF IN MARYLAND

W. H. Stephens is a professional safety engineer with three employers. He is safety director for the Southern Maryland Electric Cooperative of Hughesville, Md., a 20,000-member organization with three branch offices; the Choptank Electric Cooperative of Denton, Md., which covers most of the rich Eastern Shore farming area across the Chesapeake

T. W. Simms, Southern Maryland line foreman at the Hollywood branch, holds a tailgate conference before going on the job near Piney Point.

Bay; and the Delaware Electric Cooperative, of Greenwood, Del. He divides his time between the three co-ops, instructing in all phases of accident prevention.

The injury rates have dropped greatly since Bill Stephens has been at these co-ops. The last electric shock injury was in 1954; a lineman lost a hand. The Southern Maryland co-op's

Safety Director W. H. Stephens shows Joseph Norris and Foreman Simms how to test a rubber glove.



last complete annual report lists a frequency rate of .87 and a severity rate of 2.03. Choptank's rate was 1.43 for frequency, and 5.72 for severity. Delaware's frequency rate was .84 and severity rate 5.04.

Southern Maryland Electric Co-operative, where the pictures on this

page were taken, won five 50,000 man hour award bars in 1958. The Southern Maryland co-op management says it can prove that safety pays. Safety program improvement won it a reduction of about \$4,200 in insurance premiums last year over the preceding year. ■



Rubber blankets are securely fastened.

Norris makes a disconnect with his hot stick.



MUST JOHNNY BE JUST A STATISTIC?

by F. G. Jolley, Jr., Results Engineer,
Telephone Engineering Division

Johnny Jones, 23 years old, was the number-one maintenance man for the Sunshine Valley Telephone Co-operative, and was rated as the best employee this system had. Johnny had graduated from the local high school, and at age 19 had married the prettiest girl in town. Susan was intent upon making a good home and being a partner to Johnny as well as the mother of their children, Jimmy, age 3, and Joanne, age 1.

Johnny had started to work for the cooperative as an apprentice, with the understanding that if he showed ample aptitude he would be given an opportunity to go to school and learn the technical job of maintaining the cooperative's several offices of automatic dial equipment. This was a real opportunity for Johnny, since he knew it would be nearly impossible for him to support Susan and the children, make the monthly payments on the home and car, and raise the \$500 or more it would otherwise cost to attend the school.

The cooperative sent Johnny to the equipment school at their expense. The manager and the members of the board of directors were in unanimous agreement that this was a very good investment. The telephone service was much improved after Johnny took over the job of maintenance. Subscribers no longer found it necessary to call and register repeated service complaints. Board members compla-



cently felt the co-op was well on its way to being a well run, well managed and well directed business concern.

Since Johnny was so keen on doing a good job, it became a practice for the manager to have him take the emergency after-hour trouble calls. Johnny could be trusted to do a good



job, keep the subscribers satisfied and, above all, the extra pay was an added inducement. After all the co-op had quite an investment in Johnny.

So Susan was not surprised when Johnny received a call from Mr. Smith, who operated a large stock farm, asking that Johnny get his telephone back in service even though it was 10 P.M. and a wind storm was brewing. Calves were being born to Mr. Smith's prize dairy herd and a vet might be needed any time.

This was old stuff to Johnny; he had been out many times alone at night on trouble and there was nothing to be concerned about. He knew every line on the system and had no fear when it came to climbing poles and clearing line troubles at night.

Susan became worried when Johnny had not returned or called at 12:30 A.M. At 1:30 she finally called the manager and told him that she was worried and feared that something had gone wrong. Johnny had always called when it appeared he was to be very long on a night call. The manager, having a lot of respect for Johnny's ability and his record of always getting the job done, was not too perturbed. Johnny always came through. At 2:00 A.M. no word, so the manager attempted a call to the home of Mr. Smith, and got no answer. They found Johnny at 2:30 A.M. He was hanging in his safety belt from the top

of a pole where he had located the trouble and had attempted to uncross the wires that served Mr. Smith's telephone.

Johnny had become a statistic by electrocution on a joint use pole line. WHY? Yes, why had Johnny ever dared to climb that pole in the middle of the night, alone, and why did he ever risk his life by attempting to unwrap the wires with his bare hands? What on earth could this boy be thinking to attempt such a thing? Hadn't Johnny always been careful when doing his work?

All these, and many more such thoughts will go through the mind of the manager before he can muster the courage to break the sad news to Susan. Just how can he tell her this was just another accident? How can he explain that the reason Johnny was not afraid to handle bare wires in the dark of night was because he had not been trained to respect and treat all wires as if they were *HOT*. Can he really explain the reason for no rubber gloves was because the co-op had not seen fit to furnish such equipment. Is the fact that telephone people are generally only working with wires carrying 52 volts a legitimate excuse? Will Susan be told that the Board of Directors were lax in their responsibility in not formulating a **SAFETY POLICY** and in seeing that such a policy was being carried out by the Management?

Just what will the excuses be???

The co-op must think of a replacement as soon as possible. Service must go on. The cost of training a replacement will be very taxing to the co-op. But how about Susan and two very young babies, made orphans by the negligence of people who were made responsible and who were trusted and respected by Johnny? The co-op and its responsible board and management will recover and continue on. A

young woman, made a widow, with two babies to care for, hasn't much to look forward to, has she? Just where did the responsibilities lie in the case of Johnny and many more of his buddies who are attempting in every way to do their job as their supervisors would have them do it? ■

SAFETY is a MANAGEMENT RESPONSIBILITY:

The development of effective safety programs for REA-financed rural telephone systems is a direct responsibility of the boards of directors and managements of those systems. Management must be sincerely concerned with safety practices, if these practices are to be effectively carried out by all supervisors and by the employees. The need for concern on the part of borrower management in establishing safety programs arises from several important considerations:

- A. Interest in the welfare of employees.
- B. Potential financial loss affecting all concerned.
- C. The importance of good public relations.
- D. Financial loss to the employee's family.

With these considerations in mind, REA urges the boards of directors and management personnel of telephone borrowers to take a direct and continuing interest in the safety practices of their organizations and to establish periodic checks to assure that these practices are continually followed by all employees. ■

KEEP YOUR EMPLOYEES OUT OF THE STATISTICAL COLUMN.

REA's policy to concern itself with the safety practices of its borrowers is



set forth in REA BULLETIN 447-1 "Safety Practices for Rural Telephone Systems", dated October 31, 1958.

REA's Telephone Operations Manual has the following sections on SAFETY. Section 1208. "SAFETY PRACTICES" dated April 1958 contains 85 pages covering Management Responsibilities, Company Policy, Employee's Responsibilities, General Practices, Outside Plant Practices, Central Office and Shop Practices, Motor Vehicle Practices and The Care of Rubber Gloves. Attached to this section is also a list of available Safety Publications and where they may be obtained.

Section 1208.1 "Emergency Procedures in Reporting Injuries." This is an outline on the development of a procedure and the methods of reporting injuries and accidents.

Section 1208.2 "Safety Practices, Construction of Telephone Facilities on Joint Use Pole Lines." This practice covers the construction activity from guarding the work areas to removal of an employee from contact with a live wire.

Section 1208.3 "Safety Practices, Maintenance of Telephone Facilities on Joint Use Pole Lines." This information is a MUST for every System and if followed will be an assist in saving many lives. ■



We Think *Safety* All The Time

Proper safety procedures pay off. That's what the REA-financed Consolidated Telephone Company, of Florence, Ky., says, and its management has facts and figures to back up its statement.

Consolidated's staff has had no "lost-time" accidents for more than 3 years. Four of its men have received individual awards for 5 years of "no accident" driving, and the company has been awarded two handsome plaques by the Kentucky Motor Transport Association in recognition of its spotless record for 1957 and 1958.

Safety, at Consolidated, is more than a word in the dictionary under "S."

"We keep our men reminded of safety at all times, and in different ways," says G. B. Foscue, Jr., vice-president and general manager. "Every truck is equipped with safety

equipment, rubber gloves, first aid kits, 'men working' signs, warning flags, flares, auxiliary headlights, and automatic red and yellow blinking signs. We don't let our staff forget about safety, not if we can help it."

Consolidated uses various ways of keeping safety uppermost in the minds of its staff. For example, on the first Wednesday morning of each month, Plant Superintendent Roy Brooks calls a plant meeting, attended by all employees. Both workers and management contribute to the constant education on safety precautions.

"It's our responsibility," Foscue says, "and we don't let the men forget it."

Each plant meeting lasts as long as one hour, and various subjects are discussed. The company's perky little newsletter, "Consolidated News and Views," had this to say about safety:

"We would like to bring out a very important point of our safety program. The point is that our safety alertness should not stop when we leave our jobs for the day but should go with us, on the streets, highways (whether driving or walking), and, of course, into our homes."

The newsletter, incidentally, is the brainchild of L. T. Utz, secretary-treasurer, who makes sure that every

◀ Consolidated's bulletin board gets lots of attention from Don Washburn, Glenn Smith and Bob Placke.

issue contains at least one item on proper safety precautions.

All of Consolidated's drivers come under Kentucky's point system for motor vehicle violations. Each infraction means one or more points on the driver's record. When the total gets high enough, the driver's license is suspended, or revoked entirely. Management is proud of the fact that not one of its employees has any points on his record, either on or off the job.

Consolidated's entire fleet of leased trucks is overhauled every year. Each truck is completely emptied and cleaned. First-aid kits are checked and re-filled, warning signs are cleaned and painted, and all tools are checked and replaced, when needed. Climbers' gaffs and straps get a special going-over to keep them in tip-top safe condition.

Every truck motor is equipped with a governor which automatically keeps the speed down to 45 miles per hour. This device is installed, free of charge, by the truck leasing service, and is recommended by that concern, especially for urban driving.

Consolidated gets its recognition for safety education from many sources. The Kentucky Motor Transport Association awarded only five plaques in the whole State last year, and Consolidated got one of them. It received one the year before, too.

Individual members of the staff are honored for their safety records at an annual dinner, sponsored jointly by the company and the commercial truck rental service which owns and

leases all of Consolidated's trucks. The dinner is a gala affair held at a local restaurant and handsome pins are awarded to the men in recognition of their accident-free records. So far, four men have 5-year pins: John Huff, foreman; William Moore, lineman; William O'Hara, combination man and William Steger, cable splicer. Robert Placke, installer, has a 4-year pin.

The dinner is followed by entertainment such as a short safety film obtained from the Cincinnati Police Highway Safety Department, an insurance company film, and a couple of vaudeville acts. Safety films provided by the Cincinnati Telephone Company are also shown.

To add more impact to its safety program, Consolidated joined the National Safety Council last year and is now enrolled in the Council's annual safety contest. It doesn't let the printed materials and posters it receives from the Council lie around unopened. Rather, it tucks the posters throughout the plant, in the maintenance room, men's locker room,

Beaming with pride at her company's safety plaques is Barbara Markesberry, plant clerk.





Vince Kaub, head lineman, drives a truck that is safety-equipped from stem to stern.

garage, business lobby, and other places where the staff can't miss seeing them.

"We know that our employees notice these posters," Foscue observes "because we find little pencilled notations in the corner such as 'Linemen, please note' or 'This one is for Vincent Kaub.' "

The Company's wide-awake and

responsible position on the problem of employee safety can best be symbolized by a statement published in the March 1959 issue of its newsletter:

"While Consolidated Telephone Company has an enviable safety record, it is important that we be diligent in maintaining this record, and even improving it."



Congratulations are in order following Consolidated's safety recognition. Here are L. T. Utz, secretary-treasurer (left) and Roy E. Brooks, plant superintendent.



SAFETY MEETING — Midwest Electric, Inc., St. Marys, Ohio, offers in its *Midwest News*, "If you would like to have a meeting on safety of electricity, we can give you this type of program with a demonstration and a film on farmstead wiring. Write or call us for dates. With our demonstration panel, we can show you the various wire sizes, proper fusing (with fuses or breakers), what happens when you overload your electric wires, and proper motor protection."

DISTRICT PROGRAM — A Safety Demonstration, showing the hazards in use of portable appliances and tools, was presented at district meetings held this spring by Freeborn-Mower Cooperative Light and Power Association, Albert Lea, Minn. Adviser Herland Henke gave the demonstrations at Austin, Freeborn, and Brownsdale, where members met to choose candidates for directors to be elected at the annual meeting.

SAFETY SCORE — "What's Your Home Electrical Safety Score?" Peace River Valley Electric Membership Cooperative, Wauchula, Fla., asked its members in October 1958 *REA Rays*. Score card covered 10 key questions with columns for checking "Yes" or "No" answers. *REA Rays* also included a Home Wiring Quiz for making a room-by-room check for safety in wiring. Answers to the quiz appeared in the same issue of the newsletter.

DO-IT-YOURSELF CHECK SHEET — Parke County REMC, Rockville, Ind., announced in its February newsletter to members: "We have a check sheet available (which

some of you may have already seen, as it was talked about and passed out in several schools) for a 'do it yourself' program of inspecting your own wiring. Check sheets are also available at the county agents' offices in Rockville, Crawfordsville, Green-castle, and Brazil. These will provide a good method to see how your wiring measures up with the standard accepted practice."

FREE INSPECTION — Lincoln-Union Electric Co., Alcester, S. Dak., offers a free wiring re-inspection to all its members who are interested in this service. As part of its 1958 wiring program, the co-op also held an evening meeting on home and farmstead wiring for wiremen in its area. Matters of mutual interest were discussed, and the revised copy of *Wiring Specifications*, prepared by the South Dakota Rural Electric Association, was distributed. Changes in specifications were reviewed.

During 1958, DeWitt County Electric Cooperative, Cuero, Tex., had house wiring inspector J. L. Brown "making the routes, checking wiring throughout the system area." *Co-op News* told members, "Mr. Brown will leave a copy of his report with each home owner. Some of the items on the report will require attention. Home wiring is inspected for your safety and to keep all electricians on the same standard code."

INSTRUCTORS' CONFERENCE — The annual national conference of rural electric safety instructors is scheduled for the Neil House, Columbus, Ohio, for the week of September 28 - October 2.

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